

- 28 -

CLAIMS

1. A process for forming an underlying film, comprising: irradiating the surface of an insulating film disposed on an electronic device substrate with plasma based on a process gas comprising at least an oxygen atom-containing gas, to thereby form an underlying film at the interface between the insulating film and the electronic device substrate.
2. A process for forming an underlying film according to claim 1, wherein the insulating film is a film comprising a high-k (high-dielectric constant) material.
3. A process for forming an underlying film according to claim 1 or 2, wherein the plasma is plasma containing oxygen radicals.
4. A process for forming an underlying film according to any one of claims 1 to 3, wherein the underlying film is an oxide film.
5. A process for forming an underlying film according to any one of claims 1 to 4, wherein the plasma is plasma based on a plane antenna member (RLSA).
6. An electronic device material, comprising: an electronic device substrate, an underlying film disposed on the substrate, and an insulating film disposed on the underlying film,  
wherein the underlying film is a film which has been formed by supplying plasma from the insulating layer side.
7. The electronic device material according to claim 6, wherein the insulating film is a film comprising a high-k (high-dielectric constant) material.